

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-8. (cancelled).

9. (currently amended) A method for charging a battery from a direct-current source liable to significant fluctuations, comprising the repetitive steps of:

- converting the DC voltage from said direct-current source into a DC voltage which is higher than the voltage of said battery,

- applying said higher DC voltage to the terminals of a storage capacitor, so as to transfer energy into said storage capacitor,

- detecting a predetermined voltage threshold over the terminals of said storage capacitor, and

- upon detection of said voltage threshold, connecting said storage capacitor to said battery during a predetermined time, so as to transfer energy of a discharge pulse with predetermined energy from said storage capacitor into said battery.

10. (previously presented) The method of claim 9, implemented for charging a battery from a photovoltaic cells source.

11. (previously presented) The method of claim 9, implemented for electrically supplying a lighting equipment for a vehicle, from a bicycle dynamo-electric generator.

12. (currently amended) A device for charging a battery from a direct-current source liable to significant fluctuations, implementing the method according to any of preceding claims, comprising:

- means for storing capacitive energy,
- means for converting the DC voltage from said direct-current source into a DC voltage which is higher than the voltage of said battery,
- means for applying said higher DC voltage to the terminals ~~[[to]]~~ of said capacitive storage means, so as to transfer energy from said converting means into said capacitive storage means,
- means for detecting a predetermined voltage threshold over the terminals of said capacitive storage means—~~(14)~~, and
- means for connecting said capacitive storage means to said battery during a predetermined time, so as to transfer

energy of a discharge pulse with predetermined energy from said capacitive storage means to said battery, said connecting means being controlled by said threshold detection means.

13. (previously presented) The device of claim 12, characterized in that it further comprises filtering means (11) arranged between said direct-current source and said progressively-charging means (13).

14. (previously presented) The device according to claim 12, characterized in that it further comprises means for adapting the predetermined voltage threshold at the terminals of said capacitive storage means (14), in function of the type of battery to be charged.

15. (previously presented) The device according to claim 13, characterized in that it further comprises means for adapting the predetermined voltage threshold at the terminals of said capacitive storage means (14), in function of the type of battery to be charged.

16. (previously presented) The device according to claim 14, characterized in that the threshold-adapting means comprise a commutable resistor (35a, 35b, 35c).

17. (previously presented) The device according to claim 15, characterized in that the threshold-adapting means comprise a commutable resistor (35a, 35b, 35c).

18. (previously presented) The device of claim 12, characterized in that the progressively-charging means (13) comprise inductive storage means (29) cooperating with controlled switching means (28).